## Assignment 10

Congatulations! You have made it to the end of the course. In this assignment, you are to recap everything you have learned and use it to solve the problem below.

Please, submit this as a .m file.

## 0.1 Final Problem

The ultimate problem!

Create a function that ties into a main program. Have the main program be titled as ExampleProgram7\_Loops.m and the function it is calling Program7\_Function.m. Create a function that requires the input of the size of a square matrix, n. In the function have a loop fill a n by n vector with the first component as 1 and the second as 2 and so on. Prior to the end of the matrix, implement an if statement where if the matrix is on its last component set it equal to 12. In the main program pass a value for n into the function and set the function call equal to A. Now create a vector of ones the size of n and set the vector to b. Take the inverse of A and multiply with b. Do you have to transpose b (Answer using the disp function)?

**Note:** I wish the best to you, I am proud you have made it this far. With that said, please don't forget what you have learned. Please, build upon it!